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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/540,997 | 06/28/2005 | Cheol-Su Lee | J323-053 US | 9049 |
| 21706 7590 12/24/2009 NOTARO & MICHALOS P.C. 100 DUTCH HILL ROAD SUITE 110 ORANGEBURG, NY 10962-2100 | | | | |
| EXAMINER ANTONIENKO, DEBRA L | | | | |
| ART UNIT 3689 | | PAPER NUMBER | | |
| MAIL DATE 12/24/2009 | | DELIVERY MODE PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,997

Applicant(s)

LEE, CHEOL-SU

Examiner

DEBRA ANTONIENKO

Art Unit

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This is a Final Office Action in response to communication received 8 September 2009, wherein: Claim 1 has been amended; Claim 3 has been cancelled; therefore, Claim 1 is pending.

Response to Amendment

2. Amendments to the specification (pages 2-5 of communication dated 8 September 2009) in order to clarify the description of the invention are accepted.
3. Amendments to the specification and to claim 1 are sufficient to overcome the previous rejections under 35 USC §112, second paragraph.
4. The amendment filed 8 September 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Paragraph [0008] regarding an example of Italian marble;

Paragraph [0013] regarding the terms indicate and record;

Paragraph [0015] regarding a private key;

Paragraph [0020] regarding the audible or visual OK response;

These amendments to the original specification do not appear to be supported by the original specification. Therefore, Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

5. Applicant's arguments with respect to Miettinen, Coppersmith, and Anderson have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the **second** paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation *wherein a database (30) and an authentication/management server (20) for the electronic certificate (1) and the goods is constructed by the electronic-certificate creation server (10) at the time of creation and transmission of the electronic certificate (1)* sounds as if a whole database and a whole server is being constructed by another server. For purposes of examination, the limitation is taken to be storing an entry in the database of the authentication/management server....

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Heilper et al., US 7,222,791 B2 in view of Laurent Bussard and Yves Roudier, *Authentication in Ubiquitous Computing* in view of usenix.org and in view of A.N. Yiannopoulos, Ocean Bills of Lading: Traditional Forms, Substitutes, and EDI Systems.

Regarding claim 1, Heilper teaches a method for servicing a certificate for goods of a big-name brand or genuine quality, the method comprising the steps of: establishing an identification code for the goods, prior to one of a first purchase and a first distribution (column 2, lines 1-6). Heilper further teaches that a *printed certificate of authenticity may be printed out for customer 26 by POS 42, so that proof of authenticity may be retained* (column 3, lines 22-28). Heilper does not teach that the certificate is electronic as well as a secret code for creating the electronic certificate. However, Bussard discloses, using a watch as an example of merchandise, that *[e]ach watch contains a tamper-resistant module protecting its private key. The manufacturer signs a certificate guaranteeing the watch knowing the private key corresponding to a given public key. The user uses his PDA to view and verify the certificate. The verification is done through a wired or wireless media* (page 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Heilper with that of Bussard to use an electronic certificate in order to take advantage of current technology. Examiner notes that *[i]t is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result*. In re Venner, 120 USPQ 192 (CCPA 1958), In re Rundell, 9 USPQ 220 (CCPA 1931).

Heilper further teaches recording the identification code by using one of an audio tag, a visual tag and an RFID tag for the goods prior to one of a first distribution and a first purchase (column 2, lines 1-25). Heilper does not teach recording the secret code for creating an electronic certificate (1), the secret code being configured to be first known at the first distribution or the first purchase. However, Bussard discloses that the item *contains a tamper-resistant module protecting its private key. The manufacturer signs a certificate guaranteeing the watch knowing the private key corresponding to a given public key. The user uses his PDA to view and verify the certificate. The verification is done through a wired or wireless media* (page 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Heilper with that of Bussard to record a private key in order to be able to use it. Also, it is obvious that a private key is kept confidential and configured to be used at a time of verification otherwise the purpose would be defeated at the onset. That the time of verification is the first distribution or a first purchase does not effectively serve to patentable distinguish the claimed invention over the prior art. In other words, a private key would still be kept confidential subsequently.

Heilper does not teach requesting creation and transmission of a certificate for the goods by inputting the established and recorded identification code into a server by means of the audio tag, the visual tag or the RFID tag at the time of the first distribution or the first purchase. However, Heilper teaches electronically reading a bar code,

requesting verification, which is transmitted and viewed, and then a certificate may be printed out. Heilper teaches that *[a]t the time of purchase, code reader 40C attached to retailer 24 may read bar code 38E on the label of item 16... POS unit 42 may send a query 30 to authority 10 requesting a verification of whether or not item 16E is original... If the records so indicate, authority 10 may then send (step 32) a verification to POS 42, verifying that item 16 is a non-counterfeit original, and is available for sale by retailer 24... Customer 26 may view query 30 and verification 32 at POS unit 42... a printed certificate of authenticity may be printed out for customer 26 by POS 42, so that proof of authenticity may be obtained...* (column 3, lines 10-28).

Heilper does not teach said electronic certificate (1) comprising a character image which can be selected from among several shapes, and a management program as well as the identification code and secret code, and being constructed so that only one electronic certificate can be created per goods. However, usenix.org discloses that *[t]here are many ways to represent items electronically... Item Certificate: this is the electronic item itself in the shape of an unforgeable certificate [therefore, only one] and having a one-to-one correspondence with the physical item* (page 14, Section 7.1). Examiner asserts that with electronic authentication, a management program is implicit. Heilper teaches that the *customer 26 may view query 30 and verification 32 at POS unit 42, so that customer 26 may be assured that item 16E is an original* (column 3, lines 22-28). Bussard discloses that *[t]he user uses his PDA to view and verify the certificate* (page 6). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the invention of Heilper and Bussard combination with that of usenix.org to use shape as an easy means of identification because a shape is visually distinctive.

As to firstly creating the electronic certificate (1) for the goods at the electronic-certificate creation server (10) after confirming the identification code, when the request for genuine quality certification is received; and transmitting the firstly created electronic certificate (1) to a client (50) of the first distributor or first purchaser through a wire/wireless network (40). Heilper teaches that the certificate is created after the identification code is confirmed (column 3, lines 22-28). Heilper also teaches that *authority 10 may then send (step 32) a verification to POS 42, verifying that item 16 is a non-counterfeit original... Customer 26 may view query 30 and verification 32 at POS unit* (column 3, lines 10-28).

Heilper does not teach displaying the character image of the transmitted electronic certificate (1) on a display apparatus of the client (50) so that possession of the big-name brand or genuine quality can be shown, and authenticating the big-name brand or genuine quality can be achieved even without the step of authenticating the actual goods themselves, but by merely authenticating the electronic certificate. However, Bussard discloses that *the user uses his PDA to view and verify the certificate. The verification is done through a wired or wireless media* (page 6). Furthermore, usenix.org discloses that *[t]here are many ways to represent items electronically... Item*

Certificate: this is the electronic item itself in the shape of an unforgeable certificate and having a one-to-one correspondence with the physical item (page 14, Section 7.1).

Heilper teaches that the *customer 26 may view query 30 and verification 32 at POS unit 42, so that customer 26 may be assured that item 16E is an original* (column 3, lines 22-28). Bussard discloses that *[t]he user uses his PDA to view and verify the certificate* (page 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Heilper and Bussard combination with that of *usenix.org* to use shape as an easy means of identification because a shape is visually distinctive.

Heilper teaches wherein a database (30) and an authentication/management server (20) for the electronic certificate (1) and the goods is constructed by the electronic-certificate creation server (10) at the time of creation and transmission of the electronic certificate (1) (column 3, lines 55-60).

Heilper teaches transmitting results of the certification or authentication as for the electronic certificate (1) and/or information on the goods of the big-name brand or genuine quality when certification or authentication is requested from the client (50) through the authentication/management server (20) (column 3, lines 10-28).

Heilper does not teach moving the electronic certificated to the client of a transferee together with transfer of the goods; and canceling the electronic certificate from the

client of a transferor, so as to achieve a change in ownership of the goods of the big-name brand or genuine quality. However, Yiannopoulos discloses that *[t]he Private Key will "allow the holder to transact future sales or transfers of ownership in the goods" ...the carrier will confirm the transmission and will transmit all of the data contained in a receipt message except the Private Key to the proposed new holder. Only after the proposed new holder accepts the transfer does the carrier cancel the old Private Key and issue a new Private Key to the new holder* (page 28). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Heilper and Bussard combination with that of Yiannopoulos to include secure electronic transmission in order to facilitate the transfer of ownership.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chia-Cheng Chu, US 2004/0230528 A1 teaches network-based method and system for anti-counterfeiting merchandise authentication.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBRA ANTONIENKO whose telephone number is (571)270-3601. The examiner can normally be reached on Monday through Thursday, 7:00 AM to 5:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DA

/Dennis Ruhl/

Primary Examiner, Art Unit 3689